

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant:** Tetsuo Shibuya

**Examiner:** Unassigned

**Serial No.:** 09/737,190

**Art Unit:** Unassigned

**Filed:** December 14, 2000

**Docket:** 14043 (JP919990270US1)

**For:** A METHOD FOR CHANGING  
A TARGET ARRAY, A METHOD FOR  
ANALYZING A STRUCTURE, AND AN  
APPARATUS, A STORAGE MEDIUM AND A  
TRANSMISSION MEDIUM THEREFOR

**Dated:** November 5, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

RESPONSE TO NOTICE OF  
INCOMPLETE REPLY

Sir:

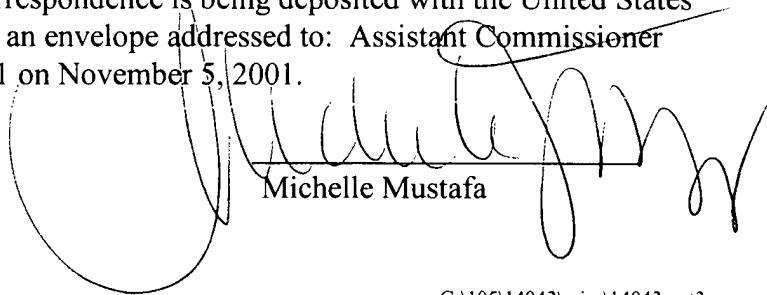
In response to the Notice of Incomplete Reply dated October 5, 2001 and further in accordance with the provisions in 37 C.F.R. §1.821 and instructions received from the United States Patent and Trademark Office Customer Service Center Supervisor, Ms. Valerie Kinerd on November 5, 2001, Applicant herewith submits a substitute paper copy of a Sequence Listing and a substitute computer readable copy of the Sequence Listing, along with a separate Statement Under 37 C.F.R. §1.821(f), stating that these copies are identical.

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CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231 on November 5, 2001.

Dated: November 5, 2001



Michelle Mustafa

Responsively to a Notice of Incomplete Reply dated June 4, 2001 issued in response to Applicant's failure to completely respond to the Notice to File Missing Parts issued March 21, 2001 and in accordance with the provisions in 37 C.F.R. §1.821, Applicant in good faith submitted to the United States Patent and Trademark Office (i.e., "USPTO") on July 11, 2001 an initial paper and an initial computer readable copy of the Sequence Listing, along with a separate Statement Under 37 C.F.R. §1.821(f), stating that these copies are identical.

In response to Applicant's submission of July 11, 2001, the USPTO issued a new Notice of Incomplete Reply dated October 5, 2001, ascertaining that the initial paper and an initial computer readable copy of the Sequence Listing had errors and directing the Applicant to provide substitute paper and computer readable copy of the Sequence Listing. That is, the errors consisted of nucleotides being designated as 'n' in the second sequence listing for organism "Streptococcus angionosus." Therefore, Applicant herewith submits a substitute paper copy of the Sequence Listing and the substitute computer readable copy of the Sequence Listing, along with a separate Statement Under 37 C.F.R. §1.821(f), stating that these copies are identical. Applicant respectfully submits that the 'n' at all positions in the second sequence listing (i.e., ascertained as errors by the USPTO) have now been correctly designated, i.e., representing nucleotides that are uncertain.

On November 5, 2001, Applicant contacted the USPTO regarding the time period for reply set forth in the Notice of Incomplete Reply dated October 5, 2001. The Customer Service Center Supervisor, Ms. Valerie Kinerd, stated that since the initial paper and the initial computer readable copy of the Sequence Listing were filed in good faith, the Notice of Incomplete Reply of October 5, 2001 set forth an inappropriate time period for the reply, i.e., running from the original Notice of Incomplete Reply dated June 4, 2001 instead of the subsequent Notice of October 5, 2001. The Supervisor, Ms. Valerie Kinerd, further advised the Applicant that Applicant would not incur any additional extension of time fees if the substitute paper copy of the Sequence Listing and the substitute computer readable copy of the Sequence Listing are filed with the USPTO within a month of the above-identified Notice of Incomplete Reply of October 5,

2001, i.e., by November 5, 2001. As above-mentioned, Applicant herewith submits the substitute paper copy of the Sequence Listing and the substitute computer readable copy of the Sequence Listing, along with the separate Statement Under 37 C.F.R. §1.821(f), stating that these copies are identical. Applicant respectfully submits that no additional fees are therefore due.

However, if the USPTO determines that additional fees are due, the USPTO is advised that the following deposit account is to be charged in connection with such fees: 50/0510.

Applicant respectfully submits that the content of the substitute paper and substitute computer readable copies of the sequence listing does not introduce new matter.

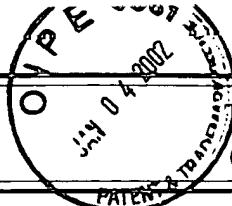
Respectfully submitted,



Steven Fischman  
Registration No. 34,594

SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, New York 11530  
(516) 742-4343

SF/AGV:ab



TRANSMITTAL LETTER  
(General - Patent Pending)

Docket No.  
14043 (JP919990270US1)

In Re Application Of: Tetsuo Shibuya

Serial No.

09/737,190

Filing Date

December 14, 2000

Examiner

Unassigned

Group Art Unit

Unassigned

Title: A METHOD FOR CHANGING A TARGET ARRAY, A METHOD FOR ANALYZING A STRUCTURE, AND AN APPARATUS, A STORAGE MEDIUM AND A TRANSMISSION MEDIUM THEREFOR

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Response to Notice of Incomplete Reply; Copy of Notice of Incomplete Reply dated 10/5/01;  
Statement Under 37 C.F.R. 1.821(f); Paper Copy of Sequence Listin and Computer Readable Form of Sequence  
Listing on Diskette

in the above identified application.

- No additional fee is required.
- A check in the amount of \_\_\_\_\_ is attached.
- The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 50/0510 as described below. A duplicate copy of this sheet is enclosed.
  - Charge the amount of \_\_\_\_\_
  - Credit any overpayment.
  - Charge any additional fee required.

Signature

Dated: November 5, 2001

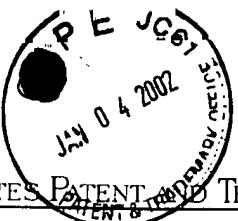
Steven Fischman  
Registration No. 34,594  
Scully, Scott, Murphy & Presser  
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Garden City, New York 11530  
(516) 742-4343

I certify that this document and fee is being deposited on November 5, 2001 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Michelle Mustafa

Typed or Printed Name of Person Mailing Correspondence

CC:



## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/737,190	12/14/2000	Tetsuo Shibuya	14043 (JP919990270US1)

CONFIRMATION NO. 9159

## FORMALITIES LETTER



\*OC00000006851599\*

SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, NY 11530

Date Mailed: 10/05/2001

## NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

*Filing Date Granted*

The U.S. Patent and Trademark Office has received your reply on 07/13/2001 to the Notice to File Missing Parts (Notice) mailed 06/04/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

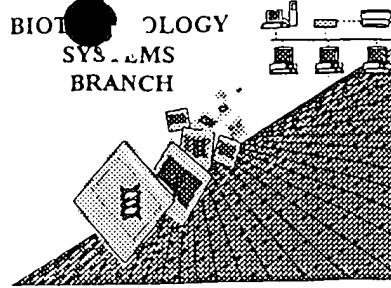
- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice MUST be returned with the reply.*

*[Signature]*  
Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/737,190

Source: 07PE

Date Processed by STIC: 7/25/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:  
<http://www.uspto.gov/web/offices/pac/checker>

**Raw Sequence Listing Error Summary**

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>09/737,190</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <input type="checkbox"/> Wrapped Nucleic Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input checked="" type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input type="checkbox"/> Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.	

OIPE

**RAW SEQUENCE LISTING**  
PATENT APPLICATION: US/09/737,190

DATE: 07/25/2001  
TIME: 13:05:30

Input Set : A:\14043.asc  
Output Set: N:\CRF3\07252001\1737190.raw

4 <110> APPLICANT: Shibuya, Tetsuo Does Not Comply  
5 <120> TITLE OF INVENTION: A Method for Changing a Target Array or a Method Diskette Analyzing  
6 a Structure, and an Apparatus, a Storage Medium and a  
7 Transmission Medium Therefor  
8  
10 <130> FILE REFERENCE: JP919990270US1 (14043)  
12 <140> CURRENT APPLICATION NUMBER: 09/737,190  
13 <141> CURRENT FILING DATE: 2000-12-14  
15 <160> NUMBER OF SEQ ID NOS: 2  
17 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

351 <210> SEQ ID NO: 2  
 352 <211> LENGTH: 1334  
 353 <212> TYPE: DNA  
 354 <213> ORGANISM: Streptococcus anginosus  
 355 <400> SEQUENCE: 2  
 357 gaacgggtga gtaacgcgta ggtaacctgc ctattagagg gggataacta ttggaaacga 60  
 359 tagctaatac cgccataaacag tatgtAACAC atgttagatg cttgaaaAGAT gcaattGcat 120  
 361 cgcttagtaga tggacctcgCGT ttgtttagc tagtaggtAGC ggtAAAGGCC tacctaggca 180  
 363 acgatacata gcccacCTGA gagGGTgATC ggCCACACTG ggACTGAGAC acggCCcAGA 240  
 365 ctcctacGGG aggCAGCAGT agggAAATCTT CGGCAATGGG gggAAACCTG accgAGCAAC 300  
 367 gcccgtgag tgaagaAGGT tttcgatcg taaAGCTCTG ttgttaAGGA agAACGAGTG 360  
 E--> 369 tgagaatggA aagttcatac tggacggta cttAACcAGA aaggGACGGC tttactacgtG 420  
 E--> 371 ccagcAGCCG cggtAAatacG taggtccGAG gcgttGTCG gatttattGG gctgtAAAGCG 480  
 373 agcgcaggCG gtttagAAAAG tctgaAGTGA aaggcAGTGG ctcAACcATT gtaggCtttG 540  
 375 gaaACTgtTT aacttGAGTG cagaAGGGGA gagtGGAtt ccAtGtGtAG cggtaAAAtG 600  
 377 cgtAGATA tggagGAACA cccgtGGCGA aAGCggCtCt CTGtCtGtA actgacGtG 660  
 E--> 379 aggctcgaaa gcgtGGGGAG cgaACAGGAT tagataACCT hytagtccac gccgtAAACG 720  
 381 atgagtGCTA ggtGttGGGT ccttCCGGG actcAGtGcc gcAGctAAcG cattaAGcAc 780  
 383 tccGcCTGGG gagtaCgACC gcaAGGtGA aactcaAAAG aattGACGGG gcccGcacaA 840  
 E--> 385 gccgtggAGC atgtGttTA attcGAAGAG acgcGAAGAA ccttAccAGG tcttgacATC 900  
 E--> 387 ccgatGcttG ttctAGAGAT aggaAGttC ttcGGAACAT cggTGACAGG tggGcatGG 960  
 E--> 389 ttgtcgtcAG ctcgtGtCtG gagaGtGtGG gttAAAGtCCC gcaACGAGCG caaccCtA 1020  
 E--> 391 tggtagttGc catcattaAG ttggGactC tagcGAGACT gcccgtAAAtM aaccGGAGGA 1080  
 E--> 393 aggtGGGGat gacgtCAAAT catcatGCC cttatGACCT hyggctACACA cgtGctACAA 1140  
 395 tggctGGtAC aacgAGtGCg aagCCGGtGA cggcaAGCTA atctctGAAa gCcAGtCTCA 1200  
 E--> 397 gttcggattG taggctGAA ctcGcCtMCA tgaAGtCGGA atcgctAGTA atcgCggATC 1260  
 E--> 399 agcACGCCGc ggtGAATACG ttccCGGGCC ttgtacACAC cgcGtGtCAC accACGAGAG 1320  
 401 ttgttaACAC ccGA 1334

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/737,190

DATE: 07/25/2001

TIME: 13:05:31

Input Set : A:\14043.asc

Output Set: N:\CRF3\07252001\I737190.raw

L:369 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:2  
M:340 Repeated in SeqNo=2